

OPTICAL FIBER TRANSMISSION LINE

Abstract

An object of this invention is to realize satisfactory long haul transmission characteristics using two kinds of optical fibers.

5 An optical fiber transmission line consists of a plurality of local dispersion compensating spans, wide dispersion compensating spans disposed at predetermined intervals, and optical repeating amplifiers to connect each span. The local dispersion compensating span consists of a first optical fiber with positive dispersion having an effective core area of $130 \mu\text{m}^2$ or more and a second optical fiber with a negative dispersion value of -50 ps/nm/km or less to transmit the light output from the first optical fiber. The wide dispersion compensating span consists of a third optical fiber having the same configuration and composition with the first optical
15 fiber.